

## AIR QUALITY PERMIT

Issued To:	Westmoreland Resources	Permit: #1418-04
	P.O. Box 449	Administrative Amendment (AA) Request
	Hardin, MT 59034	Received: 01/27/05
		Department Decision on AA: 11/29/05
		Permit Final: 12/15/05
		AFS #: 003-0002

An air quality permit, with conditions, is hereby granted to Westmoreland Resources, Inc. (Westmoreland), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Plant Location

Westmoreland operates the Absaloka Mine, which is a surface coal mine and handling facility. The Absaloka Mine is located about 30 miles east of the city of Hardin. The general legal description of the permit area is as follows: All or portions of Sections 23, 24, 25, 26, 35, and 36 in Township 1 North, Range 37 East; Sections 19, 20, 21, 29, 30, 31, and 32 in Township 1 North, Range 38 East, in Big Horn County, Montana.

#### A. Current Permit Action

On January 27, 2005, the Montana Department of Environmental Quality (Department) received a letter from Westmoreland. Westmoreland notified the Department of a de minimis change to the coal handling facility according to the provisions of the ARM 17.8.745(1) and according to Montana Air Quality Permit #1418-03. The proposed de minimis change includes the construction of a covered conveyor to transport coal from the existing train loading facility to a closed, elevated storage bin for truck loading (550,000 tons coal per year). The change also increases the vehicle miles traveled on the access road by an estimated 45,000 miles per year. The current permitting action includes the additional equipment for coal handling and truck loading and updates the permit to reflect current permit language and rule references used by the Department.

### SECTION II: Conditions and Limitations

#### A. Emission Limitations

1. Westmoreland shall be limited to a maximum production of 11,000,000 tons of coal on a 12-month rolling period (ARM 17.8.749).
2. Westmoreland shall be limited to a maximum process flow of 3,000 tons of coal per hour from the truck dump into the storage shed (ARM 17.8.749).
3. Westmoreland shall be limited to a maximum process flow of 4,000 tons of coal per hour from the storage shed into the train loading hopper (ARM 17.8.749).
4. Westmoreland shall be limited to a maximum process flow of 2,000 tons of coal per hour diverted from the Storage Reclaim Conveyor at the Rail Loadout Structure into the new Coal Storage Silo at the new Truck Loadout facility (ARM 17.8.749).

5. Westmoreland shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304).
1. Westmoreland shall comply with all applicable standards, limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR Part 60, Subpart Y, Standards of Performance for Coal Preparation Plants (ARM 17.8.340 and 40 CFR 60).
7. Westmoreland shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
8. Westmoreland shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
9. Westmoreland shall maintain and operate the facility with the following emission control technologies and management practices (ARM 17.8.749):
  - a. Coal Conveyors – All conveyor belts shall be covered on three sides. Belt transfer points shall be hooded.
  - b. Primary Crusher, Secondary Crusher, and Screen – Primary and secondary crushers shall be enclosed. Feed points to the crushers and secondary crusher screen shall be hooded.
  - c. Coal Storage – 50,000 tons coal storage pile enclosed in a storage barn.
  - d. Open Coal Storage – Water or equivalent dust suppressant on open coal storage as necessary.
  - e. Train and Truck Loadout – Minimize the free fall distance by the use of a retractable loading chute.
  - f. Overburden and Interburden Removal – Minimize the fall distance from the dragline bucket to the spoil pile.
  - g. Coal Removal – Minimize fall distance from the front-end loader or shovel to the haul trucks.
  - h. Coal and Overburden Drilling – Use water injection on the drills.
  - i. Coal and Overburden Blasting – Minimize overshooting and minimize the area to be blasted.
  - j. Haul Roads – Chemical dust suppressant or equivalent shall be used. Westmoreland shall submit to the Department for approval, a plan for implementation of dust suppression. The plan shall be submitted by November 1, 1980.

- k. Access Road – Water or equivalent dust suppression to be employed on the access roads.
  - l. Topsoil Removal and Exposed Areas – Topsoil stripping to precede mining as closely as practicable. Reclaim overburden and interburden piles as closely behind the mining operation as possible.
  - m. Truck Dump – Bottom dump coal haulers to minimize drop distances.
10. Westmoreland shall not burn coal in the boiler containing more than the following limits, and the monthly train composite data may be utilized to represent the quality of coal used in the boiler (ARM 17.8.749):
    - a. 0.8% sulfur by weight, monthly average, on an as-received basis; and
    - b. 11.0% ash by weight, monthly average, on an as-received basis.
  11. Westmoreland's steam production rates shall be limited to a maximum of 8,600 pounds per hour from each boiler (ARM 17.8.749).
  12. Soot blowing shall be done once per eight-hour shift by manually opening and closing air valves to the front and back blow-down units and actuators (ARM 17.8.749).
  13. Boiler ash shall not be disposed of at a location where wind may cause the material to become airborne (ARM 17.8.749).

#### B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

#### C. Operational Reporting Requirements

2. Westmoreland shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
  - a. Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
2. Westmoreland shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the

proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by Westmoreland as a permanent business record for at least five years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

Westmoreland shall document, by month, the tons of coal production. By the 25<sup>th</sup> day of each month, Westmoreland shall total the tons of coal production for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

#### D. Ambient Monitoring Requirements

1. The Department may require Westmoreland to conduct additional ambient monitoring if necessary.

### SECTION III: General Conditions

- A. Inspection – Westmoreland shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Westmoreland fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Westmoreland of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.

- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Westmoreland may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Permit Analysis  
Westmoreland Resources, Inc.  
Permit #1418-04

I. Introduction/Process Description

. Site Location

Westmoreland Resources, Inc. (Westmoreland) operates the Absaloka Mine, which is a surface coal mine and handling facility. The Absaloka Mine is located about 30 miles east of the city of Hardin. The general legal description of the permit area is as follows: All or portions of Sections 23, 24, 25, 26, 35, and 36 in Township 1 North, Range 37 East; Sections 19, 20, 21, 29, 30, 31, and 32 in Township 1 North, Range 38 East, in Big Horn County, Montana.

A. B. Permit History

On May 11, 1978, the Montana Department of Environmental Quality (Department) issued Permit #1218 to Westmoreland for the coal handling facilities at the Absaloka mine. The coal handling facilities included a truck dump, primary and secondary crushers, storage barn, loading tipple, and conveyor belts. On May 11, 1978, Permit #1219 was also issued for the operation of the two coal fired boilers at the mine. On June 11, 1980, Permit #1418 was issued to the mine. This permit covered both Permits #1218 and #1219. On February 27, 1985, Permit #1418A was issued. The modification required a monthly averaging of sulfur and ash content, and a number of changes were made to the Monitoring and Reporting section for clarification in addition to the deletion of the meteorological monitoring requirements. On August 31, 1986, Permit #1418B was issued to Westmoreland in which the reporting requirements regarding coal quality and consumption in the boilers were removed. The permit action deleted permit conditions III.A.1 and III.A.2 in Permit #1418A.

The Department received a request from Westmoreland dated December 8, 1998, to modify Permit #1418B. Westmoreland requested renewal of their permit as well as removal of the monitoring requirements. Permit #1418B contained an expiration date because the original mine plan was to be completed by 1998. The Department renewed the permit and no expiration date was placed in the permit, which was consistent with current permitting actions. Westmoreland submitted a summary of their monitoring results, which demonstrated that their monitored ambient concentrations did not exceed the levels in the guidance document that required monitoring. Therefore, in accordance with the October 9, 1998, guidance document developed by the Department, the monitoring requirements were removed from Westmoreland's permit. The ambient monitoring requirements can be reinstated in the future if the Department determines that it's necessary. **Permit #1418-03** replaced Permit #1418B.

C. Current Permit Action

On January 27, 2005, the Department received a letter from Westmoreland notifying the Department of a de minimis change to the coal handling facility according to the provisions of the Administrative Rules of Montana (ARM) 17.8.745(1) and according to Montana Air Quality Permit #1418-03. The proposed de minimis change includes the construction of a covered conveyor to transport coal from the existing train loading facility to a closed, elevated storage bin for truck loading (550,000 tons coal per year). The change also increases the vehicle miles traveled on the access road by an estimated 45,000 miles per year. The current permitting action includes the truck loading coal handling equipment and updates the permit to reflect current permit language and rule references used by the Department. **Permit #1418-04** replaces Permit #1418-03.

. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

## I. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

### A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

2. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
3. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
4. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Westmoreland shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

5. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
6. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

### B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone

6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>
11. ARM 17.8.230 Fluoride in Forage

Westmoreland must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

9. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
10. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter.
11. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
12. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). Westmoreland is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

5. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Westmoreland was not required to submit a permit application fee because the current permitting action is considered administrative.
6. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air



contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

G. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. Westmoreland has a PTE greater than 25 tons per year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
3. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
4. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. Westmoreland was not required to submit a permit application because the current permitting action is considered administrative. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Westmoreland was not required to submit an affidavit of publication of public notice because the current permitting action is considered administrative.
5. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
6. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically

feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

7. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
8. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Westmoreland of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
  1. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
  12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
  13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
  14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- H. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
  6. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter. Westmoreland is not a PSD source since the facility is not a listed source and the PTE is below 250 tons per year of any pollutant.
- I. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
  2. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

- a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - a. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
3. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #1418-04 for Westmoreland, the following conclusions were made:
- a. The facility's PTE is less than 100 tons/year for any pollutant.
  - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
  - a. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - c. This facility is not subject to any current NSPS.
  - d. This facility is not subject to any current NESHAP standards.
  - e. This source is not a Title IV affected source, nor a solid waste combustion unit.
  - f. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Westmoreland will be a minor source of emissions as defined under Title V; therefore, the Title V permitting program does not apply to the facility.

### III. BACT Determination

A BACT determination is required for each new or altered source. Westmoreland shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

### IV. Emission Inventory

#### Access Roads

Vehicle miles traveled: 124 VMT/day (estimated)

Control efficiency is 85% for watering.

PM Emissions: PM Emission Factor (rated load capacity <50 tons): 3.00 lb/VMT  
 = 124 VMT/day x 3.00 lbs/VMT x (1-0.85) x 365 day/year x 0.0005 lb/ton = **10.2 tons/year**

PM<sub>10</sub> Emissions: PM<sub>10</sub> Emission Factor (rated load capacity <50 tons): 1.08 lb/VMT  
 = 124 VMT/day x 1.08 lb/VMT x (1-0.85) x 365 days/year x 0.0005 lb/ton = **3.7 tons/year**

## Conveyor

PM Emissions: PM Emission Factor (Westmoreland): 0.0029 lb/ton

Production limit: 2,000 ton/hour

=0.0029 lb/ton x 2,000 ton/hour x 8,760 hour/year x 0.0005 lb/ton x (1-0.90) = 2.5 ton/year/transfer point

=2.5 ton/year/transfer point x 2 transfer points = **5.1 tons/year**

PM<sub>10</sub> Emissions: PM<sub>10</sub> Emission Factor (Westmoreland): 0.0015 lb/ton

Production limit: 2,000 ton/hour

=0.0015 lb/ton x 2,000 ton/hour x 8,760 hour/year x 0.0005 lb/ton x (1-0.90) = 1.3 ton/year/transfer point

=1.3 ton/year/transfer point x 2 transfer points = **2.6 tons/year**

## Truck Loadout

PM Emissions: PM Emission Factor (Westmoreland): 0.0059 lb/ton

Production limit: 550,000 ton/year

=0.0059 lb/ton x 550,000 ton/year x 0.0005 lb/ton = **1.6 ton/year**

PM Emissions: PM Emission Factor (Westmoreland): 0.0059 lb/ton

Production limit: 550,000 ton/year

=0.0059 lb/ton x 550,000 ton/year x 0.0005 lb/ton = **1.6 ton/year**

Source	PM (tons/year)	PM <sub>10</sub> (tons/year)
Access Roads	10.2	3.7
Conveyor	5.1	2.6
Truck Loadout	1.6	1.6
<b>Total</b>	<b>16.9</b>	<b>7.9</b>

\* A complete emission inventory for Permit #1418-04 is on file with the Department. The emission inventory reflects the increase in emissions associated with this permit action.

## V. Existing Air Quality

The Westmoreland facility is located in all or portions of Sections 23, 24, 25, 26, 35, and 36 in Township 1 North, Range 37 East; Sections 19, 20, 21, 29, 30, 31, and 32 in Township 1 North, Range 38 East, in Big Horn County, Montana. Big Horn County is unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

## VI. Ambient Air Impact Analysis

The surrounding area (Big Horn County) is listed as attainment/unclassified for the NAAQS. The Department believes the current permit action will not cause or contribute to any exceedances of the ambient air quality standards.

## VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

## VIII. Environmental Assessment

The current permitting action is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Eric Thunstrom  
Date: 11/09/05